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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/065,639
Filing Date: November 05, 2002
Appellant(s): RICE ET AL.

Steven W. Hays
For Appellant

EXAMINER'S ANSWER

This is in response to the Appeal Brief filed July 8, 2008, appealing from the Office Action mailed September 16, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the Brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the Brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the Brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the Brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

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The copy of the appealed claims contained in the Appendix to the Brief is correct.

(8) Evidence Relied Upon

US 6,296,733	HUDKINS et al.	10-2001
US 6,787,593	BELL et al.	09-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 12-17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,296,733 issued to Hudkins et al. in view of US 6,787,593 issued to Bell et al.

Appellant claims a method for forming a throw-in mat having a rubber-like feel and weight. Said method comprises the following steps:

- a. providing a primary backing having carpet pile sewn therethrough,
- b. forming a recyclable, rubber-like thermoplastic backing material comprising an ethylene-octene copolymer (EO) formed using a metallocene catalyst,
- c. coupling the backing material to the primary backing to form a mat,
- d. introducing the mat into a mat press,
- e. pressing said mat at a desired temperature and pressure for a predetermined period of time to form the backing material into a desired shape including a plurality of nibs thereon,
- f. removing said mat from the press, and
- g. cooling said mat in a cold press.

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Hudkins discloses a floor mat and a method of making said floor mat (title). The floor mat comprises a fibrous face cover layer that may be a tufted carpet (i.e., pile yarns sewn into a primary backing) (col. 3, lines 3-7). The backing layer may be a thermoplastic layer that is recyclable with the cover layer (col. 3, lines 8-9). The floor mat is made in an apparatus containing a mold, four presses, and a cooling station (col. 3, lines 61-65). Three presses have one surface heated to a temperature of 121.1 - 260°C (col. 4, line 66-col. 5, line 7 and col. 5, lines 15-21 and 54-56). The cooling station comprises a press having a temperature of 4.4 - 48.9°C (col. 5, lines 56-61). The floor mat is made by coupling the cover layer to the thermoplastic backing layer by extrusion of said thermoplastic layer and molding the layers together under sufficient time, temperature, and pressure (col. 6, lines 7-12 and col. 8, lines 19-31). The pressure of the first and second presses ranges from 10 to 50 psi (col. 6, lines 27-30 and 46-47), the pressure of the third press ranges from 50 to 180 psi (col. 6, lines 55-58), and the pressure of the fourth press ranges from 1 to 10 psi (col. 7, lines 42-44). Hudkins clearly teaches the presence of integrally formed projections or nibs on the surface of the recyclable thermoplastic backing material (col. 1, lines 23-27, col. 3, lines 11-17, and Figures 6 and 7).

Thus, Hudkins teaches the present invention of claim 12 with the exception of the metallocene catalyzed ethylene-octene copolymer. However, said EO copolymer is known in the art of carpet backings for vehicle mats. For example, Bell teaches sound-deadening composites of metallocene copolymers comprising ethylene and a comonomer of butene, hexene, or octene (abstract and col. 2, lines 10-17). Said copolymer has a melt flow rate of 1-10 g/10 min and a density of less than 0.9 g/cc (col. 2, lines 17-23). The preferred metallocene copolymer is an ethylene-octene copolymer, such as Exact[®] by Exxon and Engage[®] by Dow (col. 2, lines 34-65).

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Note applicant employs the same commercial polymers for the present invention (specification, section [0019]). The copolymer is blended in a mixer with plasticizer and filler and extruded into pellets (col. 2, line 66-col. 3, line 11 and col. 3, line 59-col. 4, line 4). Said pellets are then extruded to make unsupported sheets or vehicle carpet backings (col. 3, lines 39-63 and Examples 1 and 2).

Since Hudkins is silent with respect to specific recyclable thermoplastic compositions for the backing layer, one must look to the prior art, such as Bell, for suitable materials. Thus, it would have been obvious to select the specific ethylene-octene copolymer taught by Bell for the generic recyclable thermoplastic composition in the Hudkins process of making a vehicle floor mat because the substitution of one recyclable thermoplastic material for another would have yielded predictable results to one skilled in the art at the time of the invention. Therefore, claim 12 is rejected as being obvious over the cited prior art.

With respect to claim 13, as noted above, Bell teaches the EO copolymer is blended in a mixer with plasticizer and filler and extruded into pellets (col. 2, line 66-col. 3, line 11 and col. 3, line 59-col. 4, line 4). Said pellets are then extruded to make unsupported sheets or vehicle carpet backings (col. 3, lines 39-63 and Examples 1 and 2). Hence, claim 13 is also rejected.

With respect to claim 16, Hudkins and Bell do not explicitly teach using a loss in weight feeder and underwater pelletizer to process the thermoplastic polymer. However, applicant is hereby given Official Notice that these apparatuses are well known in the art of polymer processing. [The examiner notes that the facts asserted to be common and well-known are capable of instant and unquestionable demonstration as being well-known. To adequately traverse such a finding, applicant must specifically point out the supposed errors in the

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examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art.] Thus, it would have been obvious to one skilled in the art to employ said apparatuses to carry out the process of forming the recyclable thermoplastic floor mat according to Hudkins and Bell. Therefore, claim 16 is rejected.

With respect to claims 17 and 19, the cited prior art does not explicitly teach the claimed extrusion temperature, pressing temperature, and pressing time. However, it is argued these limitations would have been obvious to one of ordinary skill in the polymer art. Specifically, these limitations are process variables determined in part by the polymer composition. One would readily be able to determine the optimum process temperatures and time in order to produce a successful polymer product. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. Varying the extrusion temperature would affect the polymer flow rate, while pressing temperatures would determine the time required in the press and vice versa. One skilled in the art can readily determine the optimum conditions. Therefore, claims 17 and 19 are rejected.

With respect to claims 14, 15, and 21, Bell teaches EO copolymers having the claimed density and a melt index within the claimed 2-4 range. However, Bell does not explicitly teach a copolymer having the claimed melt index range of 25-35 or a combination of two EO copolymers having different melt indexes. As noted above, Bell teaches the same commercial products Exact[®] by Exxon and Engage[®] by Dow as applicant. Applicant is hereby given Official Notice that it is known these products can have a melt index of in the claimed range. Specifically, Exact[®] 4023 has a melt index of 30. Thus, it would have been obvious to one skilled in the art to employ copolymers having the claimed 25-35 melt index, since said

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copolymers are readily available as a commercial product. Additionally, it would have been readily obvious to one skilled in the art to employ a combination or blend of EO copolymers since it has been held obvious to combine two compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for very same purpose. The idea of combining them flows logically from their having been individually taught in prior art. Thus, the claims which are no more than mixing together of two conventional compositions are set forth as obvious subject matter. *In re Kerkhoven*, 205 USPQ 1069. Furthermore, it is obvious to one having ordinary skill in the art to combine the separately-taught prior art ingredients which perform the same function since it is logical that they would produce the same effect and supplement each other. *In re Crockett and Hulme*, 126 USPQ 186 (CCPA 1960). Therefore, claims 14, 15, and 21 are rejected as obvious over the cited prior art.

(10) Response to Argument

1. Appellant traverses the rejection of the claims over Hudkins in view of Bell by discussing the Declaration under 37 CFR 1.131 filed on July 7, 2005 (Brief, page 12, section VII, 2nd paragraph). During prosecution, the examiner stated said declaration was insufficient to overcome the rejection because it was not commensurate in scope with the claims. Specifically, said claims “do not require completely formed nibs that do not break easily during use” (Final Rejection mailed 09/16/05, section 5). Appellant disagrees that said declaration is not commensurate in scope.

First, appellant argues the phrase “completely formed nibs” is supported by the claim language of “a plurality of nibs” and the specification drawings which show “completely formed

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nibs as reference numeral 26” (Brief, page 12, section VII, 2nd paragraph). Appellant concludes the examiner’s position “goes against the very teachings of the patent as described in the specification and drawings and must not be allowed to stand” (Brief, page 12, section VII, 2nd paragraph). In response, it is reiterated that the declaration is not commensurate in scope with the *claims*, not the specification or the drawings. The features upon which appellant relies (i.e., the “completely formed” nibs) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to the second portion of the phrase nibs “that do not break off easily during use,” appellant asserts the claim calls for the backing material which forms the nibs be “rubber-like” (Brief, page 8, 1st paragraph). Specifically, appellant states, “A rubber-like material, in and of itself, implies a material that is bendable and does not break easily as it is bent.” In response, it is noted that the claim states “a rubber-like feel and weight” but is silent with respect to what other properties of rubber, such as flexibility and elasticity, the backing may possess. “Rubber-like feel and weight” does not inherently mean the nibs “do not break off easily during use.” Without further qualification of what is meant by the term “rubber-like,” said term cannot serve to patentably distinguish.

2. Appellant also traverses the examiner’s conclusion that the declaration is insufficient since the claims do not exclude the greater presence of filler found in the Bell reference (Final Rejection mailed 09/16/05, section 5). Specifically, appellant argues that Bell requires a much greater amount of filler to provide sound deadening properties than the amount disclosed in the present invention (Brief, paragraph spanning pages 8-9). As such, appellant concludes one

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skilled in the art would recognize (a) the Bell reference does not form a rubber-like material, (b) Bell's amount of filler would interrupt the flow characteristics and not provide completely formed nibs, and (c) the Bell nibs would have a tendency to break off more easily (Brief, paragraph spanning pages 8-9).

In response, first it is noted that independent claim 12 does not limit the presence or amount of filler, melt flow rate, completeness of nib formation, or breakability of nibs. Again, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, even if the claims were so limited, appellant has provided no objective evidence that the Bell invention does not produce a rubber-like backing with completely formed nibs that do not break easily. The evidence submitted with said declaration is merely the opinion of the inventors. No objective evidence or factual support is presented. In assessing the probative value of an expert opinion, the examiner must consider the nature of the matter sought to be established, the strength of any opposing evidence, the interest of the expert in the outcome of the case, and the presence or absence of factual support for the expert's opinion. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 227 USPQ 657.

Thirdly, while appellant's dependent claim 13 includes the presence of filler, none of the claims limit the amount of filler present. If, as implied by appellant's arguments, the present invention requires a limited amount of filler to produce the claimed invention, then said claims are incomplete and possibly non-enabled. Looking to the specification, the only mention of filler is the inclusion of 55.5% by weight calcium carbonate filler in a preferred thermoplastic backing composition (section [0020] and Table 1). The amount of filler disclosed by Bell is from about

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60 to 85% by weight inorganic filler, such as calcium carbonate (col. 3, lines 3-4 and col. 4, line 33). The difference between appellant's exemplary 55.5% by weight filler and Bell's "about 60% by weight" is not necessarily significant. *In re Woodruff*, 16 USPQ2d 1934 states, "The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims....In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." Appellant not only fails to limit the amount of filler in the claims, but the specification also fails to show any criticality for its range (i.e., exemplary amount of 55% by weight). Filler is employed by Bell and appellant for the same application of a carpet or mat backing. Without evidence to the contrary, one backing is as much "rubber-like" as the other.

Hence, appellant's arguments and declaration thereto that the Bell reference does not disclose a composition that is capable of forming a rubber-like backing material as presently claimed (Brief, paragraph spanning pages 8-9) are insufficient to overcome the obviousness rejection of claim 12, drawn to a method of making a mat, over Hudkins in view of Bell.

3. Regarding claims 13, 16, 17, and 19, appellant relies upon the arguments traversing the rejection of claim 12. Since no new arguments are presented, the rejections of said claims stand for the reasons set forth above with respect to claim 12.

4. Traversing claim 14, which limits the melt index and density of the EO copolymer, appellant argues "the addition of a copolymer having this melt index range was not and likely would not be contemplated in Bell, in that such a range would negatively impact" the desired properties of Bell (Brief, paragraph spanning pages 9-10). However, appellant's arguments are

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not supported by any factual evidence. Bell teaches the same commercial products Exact[®] by Exxon and Engage[®] by Dow as applicant discloses in the specification. Said products are known to have a melt index within the range presently claimed.

5. Regarding claim 15, which also limits the melt index and density of a second EO copolymer, appellant traverses the rejection by arguing that the combination of Hudkins and Bell does not teach a mixture of EO copolymers as claimed (Brief, page 10, 1st paragraph). In response, it would have been readily obvious to one skilled in the art to employ a combination or blend of EO copolymers since it has been held obvious to combine two compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for very same purpose. The idea of combining them flows logically from their having been individually taught in prior art. Thus, the claims which are no more than mixing together of two conventional compositions are set forth as obvious subject matter. *In re Kerkhoven*, 205 USPQ 1069. Furthermore, it is obvious to one having ordinary skill in the art to combine the separately-taught prior art ingredients which perform the same function since it is logical that they would produce the same effect and supplement each other. *In re Crockett and Hulme*, 126 USPQ 186 (CCPA 1960). Appellant has shown no evidence of nonobviousness.

6. Claim 21 is a combination of the limitations of claims 12, 14, and 15. As such, appellant reiterates the arguments presented in the traversals of said claims (Brief, page 11, 2nd paragraph). Since no new arguments are presented, the rejections of claim 21 stands for the reasons set forth above with respect to claims 12, 14, and 15.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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